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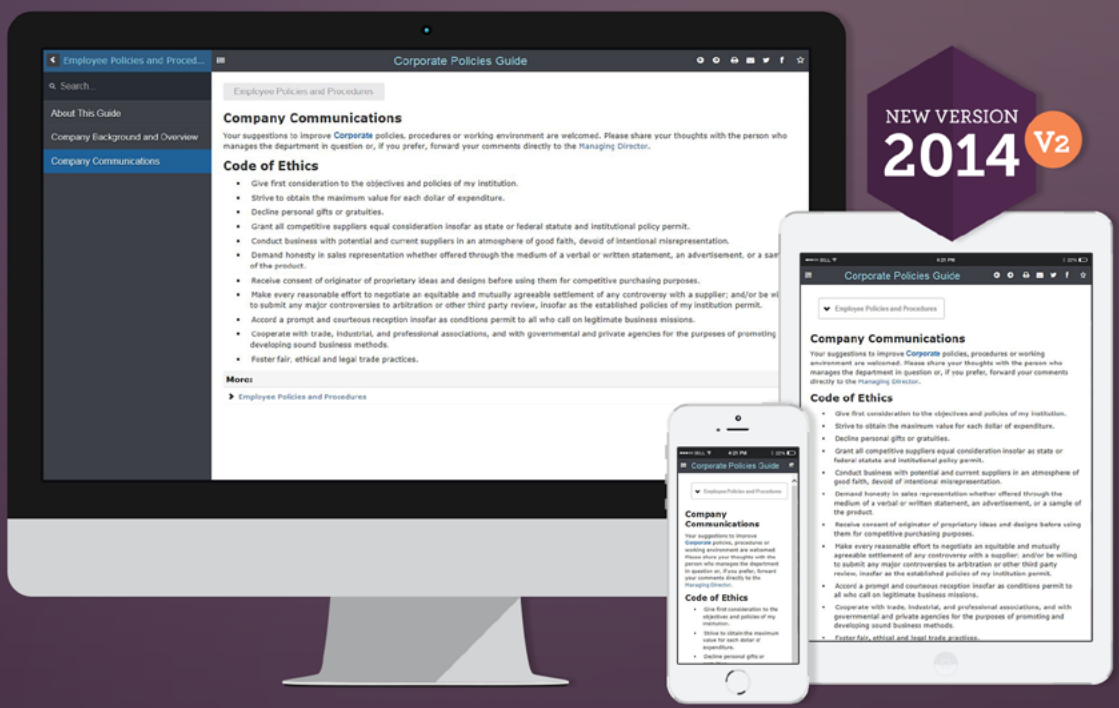

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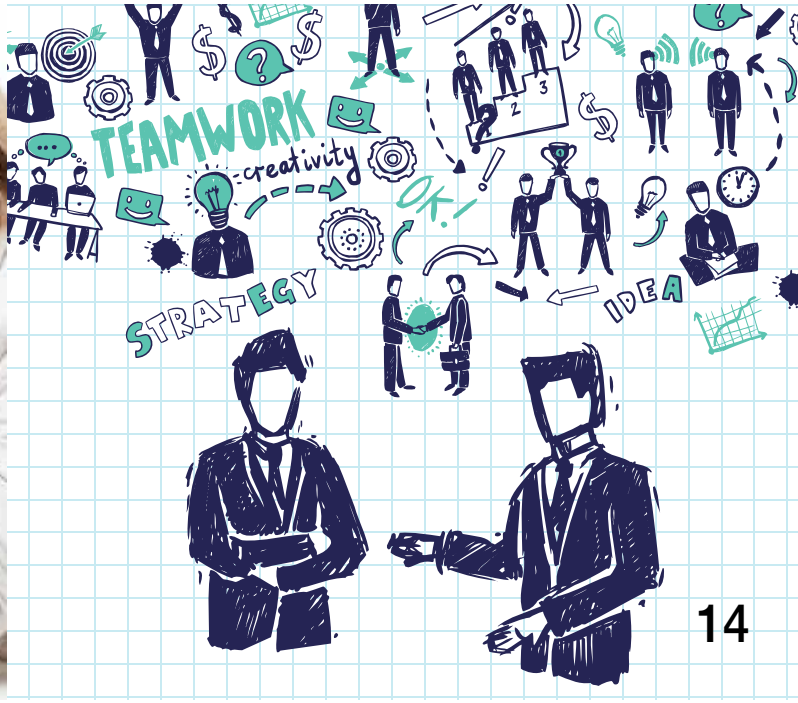

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By Victoria Deen McCrady
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By Emily January Petersen
From 39 interviews with female practitioners in technical and professional communication, the author uncovers innovative

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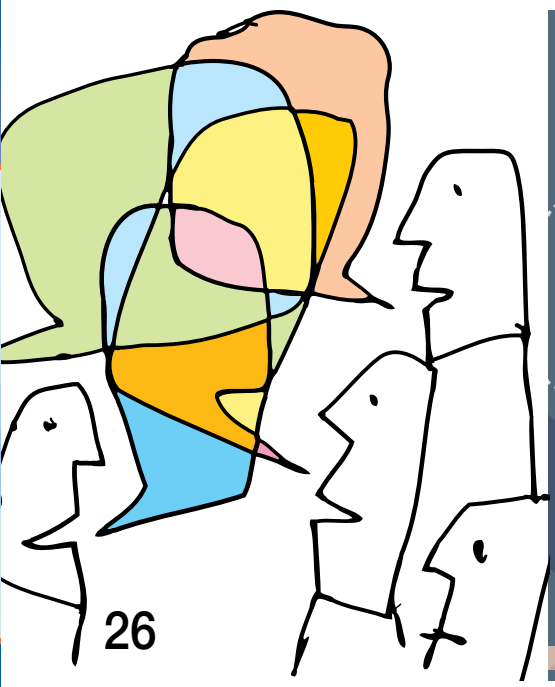

suggestions for building networks. This article shares techniques that work best for networking and maximizing its benefits based on participant experiences, including volunteering, creating company networks, and seeking out communities and professional organizations. Because practitioners in technical and professional communication are often lone writers, networking is a productive way of sharing and constructing best practices.

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A Note from the Editor

THE THEME FOR *INTERCOM* this month is Change Happens: Are We Ready? Four feature authors address this topic with articles that focus on change. Bonnie Demback provides best practices for transitioning to an Agile workplace based on her research of technical writers working in an Agile development environment. For 20 years, she was a technical writer following the Waterfall systems development lifecycle. To help adapt to Agile, a very divergent methodology, she researched the process and found SMEs who have successfully written documentation using Agile.

Victoria Deen McCrady writes about Millennials in the workforce, what distinguishes them from other generations, and how experienced technical writers must anticipate the needs of these new novice users. She asks, what do you do to make new Millennial users "sticky" when they often assume a veneer of technological sophistication that can make it more difficult for them to adapt to new interfaces? Her article includes perspectives from an EBSCO user research analyst and the owner of a technical support company, characteristics of Millennials' website interaction, and some take-away advice.

In "Preparing New Writers for Change," Aimee Whiteside shares her biggest mistakes as a technical writer to help new writers cope with transitions and organizational changes. Drawing from research, she outlines six critical skills for new writers to weather change (data gathering/problem solving, detail orientation, organization, project management, teamwork, and written and oral communication proficiency) as well as six essential core competencies (collaboration, flexibility, innovation, patience, personal mastery, and systems orientation).

As a woman, I found Emily January Petersen's article particularly interesting. From interviews she conducted with female practitioners in professional and technical communication, she has uncovered innovative suggestions for building and boosting personal networks. For many women, and especially those working as lone writers, this article will offer some best practices for changing your networking techniques.

In addition, to these four features, there are three columns in this issue. Thomas Barker's column The Academic Conversation focuses on technical writers as change communicators. Fer O'Neil and Joy Cooney, guest columnists for Derek Ross's Ethics column, use two case studies to highlight the problems of deadline-driven decisions. And Brian Still's column Trends in Usability suggests how to construct a better user experience via site visits and user shadowing.

I hope all *Intercom* readers will join me in giving a warm welcome to STC's newest staff member, James Cameron, Communications Manager and Assistant Editor. If you have any ideas for Society Pages or My Job/Off Hours articles, please contact James at *james.cameron@stc.org*. We are very pleased to have him onboard!

—Liz Pohland
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Agile Best Practices for Technical Writers

By BONNIE DEMBACK | *Senior Member*

I AM A SENIOR TECHNICAL WRITER at Sparta Systems, Inc. and document Sparta's flagship Enterprise Quality Management System (EQMS) product, TrackWise™. I have spent most of my 20 years' experience as a technical writer in a Waterfall development environment, and the big challenge for me has been to get accustomed to the Agile methodology that is in place at Sparta. To change my mindset, I began researching the Agile methodology and best practices. By embracing best practices for technical writing that have been proven effective for other writers using the Agile methodology, I have been able to be adapt to this new methodology.

Waterfall vs. Agile

Waterfall software development is a linear, sequential approach to software development. Each step represents a distinct stage of software development, and each stage generally finishes before the next one can begin. Typically user documentation cannot be started until testing has begun at the very end of the cycle.

Agile is "a group of software development methods in which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. It promotes adaptive planning, evolutionary development, early delivery, continuous improvement and encourages rapid and flexible response to change" (*http://en.wikipedia.org/wiki/Agile_software_development*).

As Lee Turner aptly states, "Agile development is an ever-changing, turbulent environment that may cause you to wonder if you even have time to plan." Unlike what is expected in Waterfall approaches, Ester Gonçalves postulates that, in Agile, "as features are being added incrementally, the documentation should be incrementally produced as well, evolving along with the development of the product."

A Writer's Guide to Surviving Agile Software Development states that "writers are trying to figure out how to meet deadlines, write quality documentation, and stay sane as their software companies switch from the traditional Waterfall method of development to the increasingly popular Agile methodology." Agile development for a traditional Waterfall technical writing team looks like chaos. My first thought was, "What's going on?"

The *Manifesto for Agile Software Development* clearly states that value is placed on "working software over comprehensive documentation" and "responding to change over following a plan." While these tenants are important to Agile, it does not imply that there is inadequate documentation or no planning. I have found just the opposite to be true. The "comprehensive documentation" referred to in the Manifesto relates to phone book sized requirements and upfront design documents that are usually out-of-date by the end of the Waterfall development cycle.

With Agile in place at Sparta, my approach to writing technical documentation had to change. Agile values documentation as a part of the product, feature, or enhancement being delivered to customers, and the new challenge for Sparta's technical writers is writing and delivering documentation as features or parts of features are developed during two-week sprints. Technical writing teams need to adjust their processes and documentation delivery methods, and employ known best practices to successfully adapt to the different methodology.

The best practices that follow reflect process changes that Sparta's documentation team needed to embrace as their new approach to Agile documentation development.

Setting Expectations – Documentation as a Requirement

The content of a software release may change based on changes in business priorities. We need to keep in mind that our documentation, just like our code, can be deferred or adjusted iteratively at any point during the project, should the product owner decide that the project needs to go in another direction.

In *Writing End-user Documentation in an Agile Development Environment,* Tana Berry asserts that "the investment in documentation is a business decision, not a technical one. You shouldn't create documentation because your process says you should but instead because your stakeholders say you should." According to Gonzales's *A Roadmap to Agile Documentation*, Agile "does not defend in its base principles the option of having no documentation at all. But it reminds teams that the focus should always be on delivering value to the customer. In the process of producing documentation, this key principle must also be taken into account."

In an Agile approach, documentation must be considered just another component of the product that is continuously updated during iterations throughout the development lifecycle. Product management (PM) and business analysts (BAs) need to rethink how documentation is presented to our customers and take an active role in:

1. Defining the expectations and requirements for documentation deliverables.
2. Verifying what is needed and what can be ignored based on customer needs.

At Sparta, we have implemented "Doc Epics" to capture requests for documentation (as suggested by Jean-Luc Mazet in *Agile Technical Documentation*), since at least some of the documentation will take more than one sprint to complete. Content is chunked into Doc Epics and Doc Issues in our Agile process. Documentation tasks are defined in each sprint. We develop content in correlation with the user stories developed and tested sprint-by-sprint.

It is important to stress with the scrum teams that these requests should be submitted as early in the process as possible. Development teams do not know how many sprints the project is going to last. This is a reason Mazet stresses: "the early participation of the documentation team in sprints to be able to fully and accurately assess the amount of total effort that the project is going to take, including user documentation and online help."

Technical writers need to involve the scrum team(s) to accomplish their tasks. Sprint-by-sprint content development is part of completing the sprint. Technical writers and scrum team members have the same goal—to deliver working software and that includes user documentation. Therefore, the team needs to ensure that documentation tasks (information gathering sessions and reviews) are properly defined for each sprint. This way SMEs and team members will be aware that time will be devoted to customer-facing documentation during the sprint or the following sprint. It also provides a heads up to all reviewers and approvers. Time needs to be allotted for the documentation tasks.

Best Practices for Technical Writers

I have identified the following best practices that our Agile documentation team needs to adopt.

1. Adapt to Change and Remain Flexible

Priorities can change rapidly in any organization. The need to quickly respond to customers' evolving needs causes changes in the prioritization of development work. Development work scheduled for certain sprints during planning can be moved to a lower priority based on higher priority items being introduced at any time. With Agile, documentation development needs to be reactive as priorities change.

The idiom "the best laid plans of mice and men often go awry" can be applied to the reality of an Agile development process. The Agile environment has change as its foundation. No matter how well we plan, we should always be prepared for change. Change is an expected part of the Agile process, but remember change does not imply chaos. It needs to become an accepted part of the process.

The bottom line for technical writers (and all Agile team members) is that we need to:

- Be flexible and respond to change
- Be prepared to redirect our efforts accordingly
- Approach challenges with an open mind

In their article *Turning Obstacles into Opportunities: Agile for Technical Communication,* Karen Smith and Patty Gale say we need to be "prepared to reverse our work. When you document features as they are being developed, there is a chance that stakeholders will decide a feature is not yet ready for release. Not only must the feature be removed from the product, but its documentation must also be removed." The solution they suggest is:

- "When you adopt Agile, consider how you will address such issues.
- [At the start of a release cycle,] make a release management plan for the documentation.
- Use a content management system with version control.
- Develop a way to track the content that is added and updated for each feature. If a feature is omitted from a release, you can more easily ensure that its documentation is removed."

2. Topic-based Approach

With Agile, technical writers need to take a topic-based, modular approach to documentation (i.e., authoring concise, self-contained units of information about a specific topic). As features or deliverable working parts of features are developed and ready for testing, the writer needs to document the feature/functionality delivered in the

current or following sprint. Content approval from BAs, PMs, and other SMEs on the content as written should also be obtained within the same period.

As Austin observes, for Epics spanning more than one sprint, topics are a work in progress until the entire Epic is ready for delivery to the customer. It needs to be understood that more details or additional content may be added as further development is completed. The teams need to account for documentation deadlines that extend beyond the product development deadline. The key is to determine from the stakeholders what they consider a deliverable working partial feature that can be implemented in production and what needs to be documented, reviewed, and approved during a particular sprint.

As is our current practice, we need to start writing content early in the development cycle to help with planning. John Collins suggests "another method for planning and getting started with writing is to generate content that is 'good enough' for now and version your results. This approach is the perfect application to writing in an Agile environment. Concentrate on what your users really need. For example, instead of shipping no document or shipping a document that's a catalog of every interface element, you can ship a basic task-based document. Perfect form can come later."

Three things to focus on when taking the topic-based approach:

- **Task-focused Content**—Focus content on what users need to do to get their jobs done. We need to write content so users can solve problems using our products. According to Alyssa Fox, "writing content targeted toward solving user pain points requires concepts, examples, and best practices information that don't easily fit the user story model." It is imperative to strive to deliver the most complete document set for each release.
- **Be a Minimalist**—Focus on the smallest units of content for each user story and expand our documentation with contextual information as needed. We write documentation for a feature in the sprint in which it is developed and tested.

  Smith and Gale recommend that technical writers work in smaller chunks of content and iterate often. "As a technical writer, it may feel uncomfortable to not have all the information to document the product. This ambiguity can be unsettling. On the other hand, knowing that the product is likely to evolve in future iterations means you [can] further refine and improve the quality of the documentation before it's delivered to users. Learn to chunk a large documentation project into smaller pieces. Work with scrum team members to break the documentation tasks into chunks that fit into a sprint, and share the load with others on your team to get it done. Identify documentation dependencies and plan them in your sprint scheduling. Flexibility and adaptability are the keys to making this work."
- **Define Topic Requirements**—The same type of content should be managed the same way. Define the requirements for each type of content presented to customers. Mark Baker states that every topic should adhere to a basic design that tells the writers exactly what needs to be said in each case. We need to implement topics … similarly expressed in a similar order. Per Baker, we need to define a specific and limited purpose for each type of topic—a separate template for feature overviews (including business use), prerequisites, concepts, tasks or procedures, references, etc. Once these are defined, content will be better organized for customer consumption. Since consistency breeds familiarity, we can provide improved customer satisfaction with our content.

3. Document (and Review) Continuously

Scott Ambler believes that accepting the idea of documenting continuously is a good place for technical writers to start. If the goal of Agile development is to have a potentially shippable product or feature at the end of each sprint or group of sprints, then technical writers need to keep deliverable documentation in sync with software changes, and they need to write deliverable documentation continuously throughout the project.

It also helps when drafted procedures and key concepts are reviewed as development is completed during the sprint. Not only will the functionality be fresh on everyone's mind, a configured environment is more likely to be available for the technical writer to use. If you wait until the end of the release cycle, you may not have the right people available to review and approve the documentation because they have moved on to other projects. In addition, Alyssa Fox posits that "working on bits of the documentation throughout the release cycle frees up time toward the end of the cycle for consolidating final documentation."

Sparta's customers are in highly regulated industries requiring ISO 9001 compliance. In *Agile Under ISO: Review and Approval on Agile Projects,* Ed Willis suggests the following documentation approval best practices to help to ensure a timely ISO 9001-compliant approval process for documentation:

- Make the review process quick and within due dates and sprints.
- Have as few approvers as possible. The more approvers there are for a document, the longer the approval will take and the more painful it will be.
- Verify the accuracy of specific content for which identified technical SMEs have proficient knowledge.
- Minimize the number of documents. As Ed Willis cautions, always make sure there is a compelling motivation for authoring a document; don't create one unless there is someone who really needs it. When figuring out what documents to produce, involve the right stakeholders but favor making things that produce immediate benefits.

Focused reviews, as mentioned by Willis, limit technical SME reviews to the specific content for which they have proficient knowledge and tell each of them where their specific attention is most needed. If, for example, you have updated only parts of an existing document, ask reviewers to concentrate on those areas. Make it clear that reviewers need not review the entire document unless it is actually necessary. This is consistent with the iterative nature of Agile and parallels the Agile code review process where small increments of change are reviewed. Code and documentation reviews are more focused and thus more accurate.

4. Agile Documentation: Digital and Online

In *Tech Docs as Agile Deliverables,* Collins advances that "Agile technical documents are frequently updated and enhanced. They are no longer monolithic piles of information, but rather evolving, ever-improving, integral parts of your product."

To accommodate faster iterations of user documentation, Agile enthusiasts, such as Austin, suggest that user documentation is best distributed online. If your method of publishing documentation includes PDFs of entire guides or printed manuals, Austin points out that:

> Physical deliverables become more complicated. Agile will be harder to implement if you're producing physical deliverables, such as printed documents. You won't be able to iterate as often, but you could maybe do smaller print runs to give yourself a chance at more iterations. (This may not be realistic, but hopefully you get the idea.) You can still probably chunk out the production work into sprint-sized tasks.

Communicate and Ask Questions

Technical writing in an Agile environment means a lot of discussions, continuous communication, and actively working with various teams. If you are not being invited to meetings or discussions, speak up. Be sure to attend requirement refinement meetings and all demos at the end of each development sprint.

According to Alyssa Fox and Meredith Kramer, "it is imperative you speak up in meetings and take the initiative to get involved in all aspects of the product development. Ask lots of questions. If you see something in a design meeting that doesn't make sense to you, or you think there's a better approach, say so. Don't be intimidated by the fact you're not a developer. It's our job to look at the product from a user's perspective. If a GUI is difficult to use, let the developer who's coding it know. If you find out planning meetings are happening without you present, talk with the ones holding the meetings and make sure you're invited in the future."

We all need to make efficient use of our time. Don't waste time in meetings that don't add value to the documentation.

Agile relies on face-to-face interaction, frequent updates, and team members who are confident enough to volunteer input. Make sure this happens. According to the Agile Alliance, schedule meetings and suggest in the invitation "that answering the following questions will save attendees from having to attend the meeting produces results. If you produce the questions, there's almost always someone on the team willing to give you answers. Also, be willing to do more digging and playing. You'd be surprised at how little you may need to get started."

Remember, communication is the key to every successful project!

BONNIE DEMBACK *is currently a senior technical writer at Sparta Systems, Inc. She has over 20 years' experience as a technical writer in various industries, including years working for Dow Jones & Co., Inc. and Rutgers University.*

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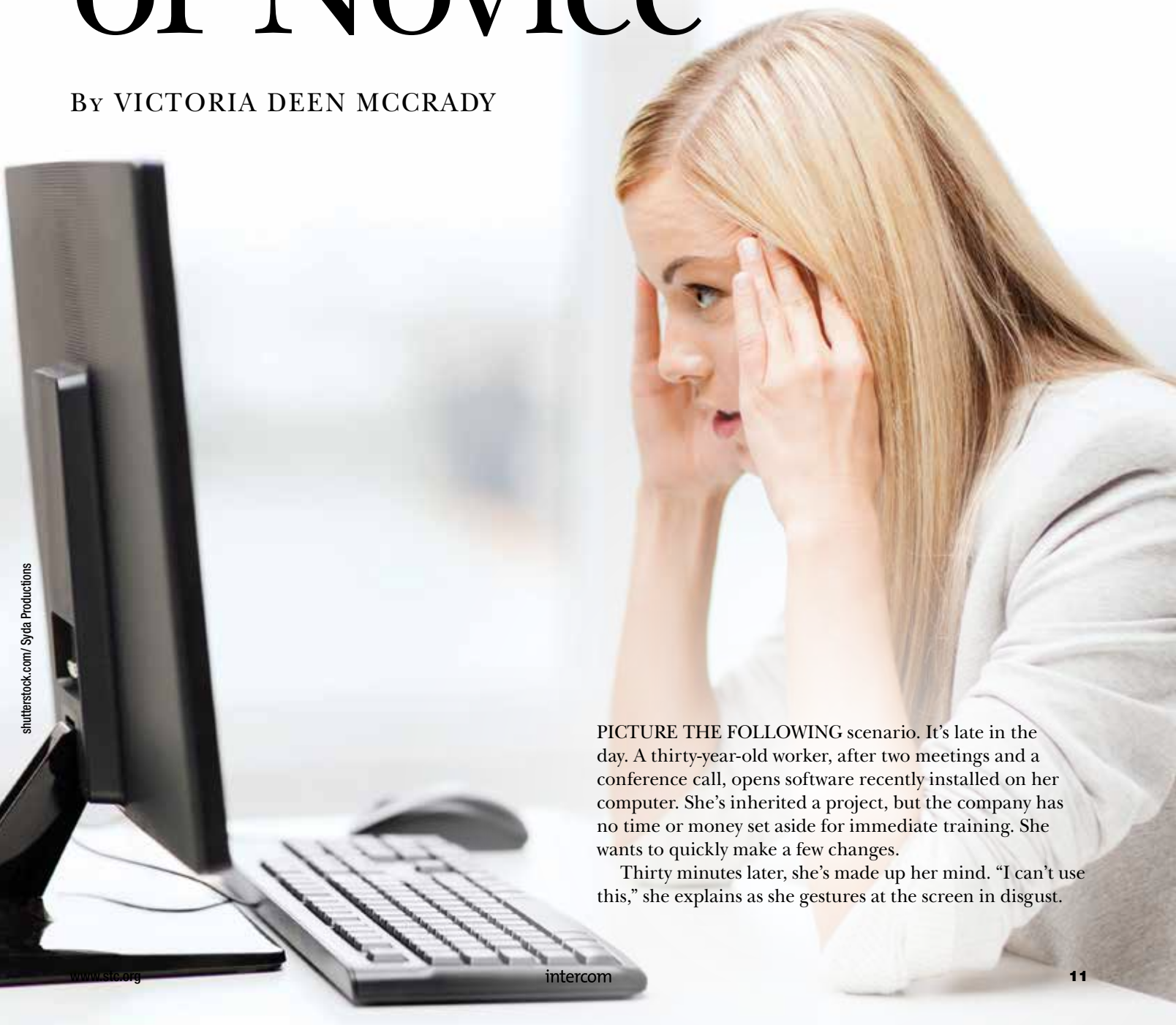
Millennials: A New Breed of Novice

By VICTORIA DEEN MCCRADY



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PICTURE THE FOLLOWING scenario. It's late in the day. A thirty-year-old worker, after two meetings and a conference call, opens software recently installed on her computer. She's inherited a project, but the company has no time or money set aside for immediate training. She wants to quickly make a few changes.

Thirty minutes later, she's made up her mind. "I can't use this," she explains as she gestures at the screen in disgust.

The previous scenario occurred when a new user accessed, for the first time, OnBase, a document-management system. OnBase has excellent reference guides—downloadable PDFs that are updated regularly and thoroughly. Most new users also take time to work through tutorials. Many employees are sent by their companies to week-long training and return to train their colleagues to use the software. It's a great system and the software works well, but….

We have reached the problem. We all know that some users just stop. These novices refuse to interact further with new software after a brief attempt, and they return to familiar software and "make do." This under-utilizes potentially useful software and limits its functionality within the company; an even greater issue is that these users tend to create "information silos." Rather than invest time with software they don't understand, users will develop stores of documents and their own idiosyncratic ways of keeping track of information (e.g., building schedules for work shifts in an Excel spreadsheet instead of the company's calendar software). Information silos frequently have no way of showing history, are often kept in places where they do not get backed up, and may be indecipherable to anybody except their creator. Obviously, this is a problematic work-around.

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* *Fluid* is approved as a noun only, unlike *liquid*, which is approved as a noun and as an adjective.

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Not "Computer People"?

This scenario occurred in the past, with Baby Boomer and Gen-X users, and particularly with those who have convinced themselves they "aren't computer people." We are entering the age of Millennials, though, and most would assume that Millennials, defined by Pew Research as those between age 18 and 34 in 2015, would adapt more readily to new software. Millennials have become a critical demographic, one that has grown up with computers and cell phones. They are projected by the U.S. Census Bureau to number 75.3 million this year, surpassing the projected 74.9 million Boomers (ages 51 to 69). Shouldn't that familiarity predict an affinity for technology?

Unfortunately, no. Many Millennials are simply a new breed of novice.

Let's begin by acknowledging that there is a danger to marketing to Millennials as if they are a homogeneous group, as Pizza Hut and McDonald's have recently discovered. However, we can also acknowledge that Millennials as a generation are distinctly different from previous generations because of their constant access to technology.

The Millennial Novice

What is the Millennial novice like? We tend to think that Millennials are tech-savvy because they constantly interact with devices. This isn't necessarily the case. While Pew Research reports that Millennials are constantly socially networked (81% are on Facebook), they are often technology-immersed rather than "savvy," and they do not always understand how the devices they use so frequently (96% of Millennials own a cell phone) actually work. They may use familiar programs and devices in very sophisticated ways, but those skills offer little help when they are confronted with new tools or interfaces. This veneer of technological sophistication suggests a level of adaptability to new software that sometimes fools even Millennials themselves. Their employers are equally flummoxed by this distinction.

What Makes Millennials Different?

Miranda Hunt, a user research analyst at EBSCO, recently presented "Search is the New Black: How Millennials Find Information Online" at the User Experience Professionals Association (UXPA) Boston 2015 Conference. In this talk, she identified common search characteristics of Millennials. Much of her data was drawn from a study by the Nielsen Norman Group titled "College Students on the Web."

Hunt argues, when using computers during college, Millennials:

- Make decisions based on convenience,
- Display a marked reluctance to learn new interaction patterns,
- Employ a self-service model as they use technology, and
- Expect an immediate payoff for effort.

That Millennials expect immediate gratification when they try something new is a common (but true) stereotype of the generation. Yet when Millennials encounter difficulties with a technology, they also want to "figure it out themselves" (the self-service model), even when they have no conceptual framework to understand the technology.

Given these interaction characteristics, what patterns do most Millennials display? Millennials:

- Expect a search box as part of the interface;
- Prefer simple, familiar interfaces;
- Conduct simple searches (rather than advanced/Boolean searches to limit/expand results);
- Search using common language (instead of keywords);
- Misspell often as they search; and
- Rely on technology always functioning as expected.

In her talk, Miranda Hunt said that spelling suggestions guide users to potentially relevant topics and help Millennials find information while compensating for misspelling and impatience.

Millennials Multitask

This generation is defined by impatience, even across cultures. The Nielsen Norman study found no differences in Web design approaches in comparisons of students from four countries on three continents. While non-native English speakers needed simple language without idioms, their overall preferences and tendencies were the same. All felt a constant urge to multitask (for example, operating with multiple browser tabs open at the same time).

In a recent interview through email, Hunt said that "the Millennial self-service model is prevalent; they expect websites, software, etc. to work and if they run into problems they will adjust their self-service strategy until they find something that works or they will give up and move on to something else. They also make decisions based on convenience, and a recent study has shown that this behavior continues upon entry into the workforce."

Obviously, the definition of convenience in college can be different from convenience in the workforce, as Hunt noted in the interview. Some Millennials will not fit this model, and motivated Millennials who become more adept might develop new problem-solving strategies to enhance their careers.

Millennials in the Workforce

The information to this point has focused on Millennials in college. Since many Millennials are currently immersed in their careers, it seems important to ask, "Are Millennials who are currently in the workforce more motivated to break out of their 'self-service' and 'convenience' patterns?"

Teresa Hale, the co-owner of TJC Consulting, a Garland, Texas company that provides outsourced technical support, works frequently with Millennials employed at accounting and law firms. Approximately a third of the company's users are college-educated Millennials. She said these users are more motivated than Baby Boomers to try to resolve computer problems. While their solutions are often not complex, Millennials "tend to try three to five different strategies to resolve their issues before calling for help." If these users are so fond of self-service, what prompts a Millennial's urgent call to the help desk? Hale said that this group freezes when they encounter text-heavy instructions or advanced options (radio buttons and dialog boxes).

Hale's observations supported many points from the Nielsen Norman study. She said, "Programs that look like social networking sites, with sleek design, obvious graphics and areas to click, make [Millennials] feel comfortable." When users run into trouble, if the program does not have an obvious search function, Millennials tend to go outside the program for help first. They don't press F1; they use Google and look for a video tutorial.

The New Novices

Despite the myth that Millennials are technological wizards, their technical immersion actually means that they are more rigid in some ways than previous generations. Their transitions from a familiar interface to a new interface are likely to be difficult, particularly when paired with their tendencies to frustration and multitasking.

To meet these users' need for self-service:

- Look at usage patterns.
- Give immediate feedback on usage when possible.
- Offer tips, tutorials, and wizards, but allow users to easily turn them off.
- Provide up-to-date video tutorials that can be easily found online.
- Reassess the interface when problems arise.
- Respond immediately to direct user contacts or complaints.

VICTORIA DEEN MCCRADY *was, 13 years ago, a technical writer for a software company. In the years since, she's taught Millennials about clear communication as a college professor. She is currently a senior lecturer in business communication at the University of Texas at Dallas. Victoria's experience as a member of STC has always given her a great perspective on reaching her audiences.*

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Preparing New Writers for Change

By AIMEE L. WHITESIDE

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WHEN I WAS a student transitioning into my first job as a technical writer and simultaneously beginning to navigate through the changes in that organization, I got it all wrong.

Here were five of my biggest mistakes:

Big Mistake #1: Act Like You Know Everything

Our newest writers often feel a need to prove they know it all, and, as a result, they can appear disrespectful, hasty, and impatient to senior staff. I, unfortunately, fell into this category. After graduation, I thought I knew everything about being a masterful technical communicator. After all, I read the textbooks; I listened attentively in class and took copious notes. In my young mind, I was a force—an unstoppable taskmaster newly released from the chains of the classroom door. I saw myself as an untethered super writer swooping in to save the day, while spouting off my grammar prowess and memorized passages from the *Chicago Manual of Style*. In retrospect, I regret not asking questions and reflecting more. I had so much to learn.

Big Mistake #2: Fail to Appreciate Workplace Experiences

In hindsight, my first job allowed me incredible flexibility and great benefits. Unfortunately, I saw it as only a job among other jobs, not an opportunity to grow and learn. Although it certainly is important to plan ahead and weigh your options, I would have been better served by taking some time to smell the roses and take in the experience.

Big Mistake #3: Miss Opportunities to Learn from Experienced Writers

Learn from others! Sadly, I didn't fully appreciate the experts around me. For the most part, they truly wanted to help. Yet I didn't think to connect with them to learn their stories, their experiences, or their thoughts about current changes in the organization. They were fountains of knowledge not only about the company and its history, but also about a technical communicator's role in the larger organization. They had seen many iterations of change. Another missed opportunity.

Big Mistake #4: Lack Authenticity and Compassion to Cultivate Relationships

When I interviewed subject matter experts, I half-heartedly feigned interest so I could get information. It must have been obvious that I wasn't really truly interested in their families or awards. What I didn't understand then is that cultivating relationships with your subject matter experts is critically important, and it means being authentic and building trust over time. Looking back, these were all missed opportunities to connect and build collegial relationships and, perhaps, lifelong friendships.

Big Mistake #5: Fail to Conduct Adequate Research

A large portion of a technical communicator's role involves research, experimentation, and problem solving. At the time, I didn't see these parts as vital responsibilities or even as my responsibilities. After all, they weren't listed in the job ad and writers write, right? In the early days of my career, I practiced a myopic, rigid approach to my craft, and I didn't do enough exploration, research, and experimentation of the products and services offered. Instead, I saw my work as a race to the finish line.

A Second Chance to Help New Writers Better Prepare for Change

Decades later, I have made it my mission to help new writers to better navigate and embrace change. I hope to help them see the workplace as shades of opportunity where they can engage, listen, inspire, and transition with ease. At the same time, I hope to instill in them the importance of respecting the knowledge and experience of the experts around them.

Back to Basics: What Managers Ultimately Want in their New Writers

Several years ago, I engaged in an exploratory study about the experience of new technical communicators in the field and technical communication managers. As a former technical writer and consultant, I was not surprised by the results. The results suggested that new writers feared that they did not know enough technology; whereas, managers ultimately wanted exceptional basic writing, teamwork, and communication skills. Managers rationalized that the foundational skills were all that mattered; everything else could be learned. In their view, the basic role of the technical communicator and the critical skill sets had not changed all that much even in the face of numerous technological innovations.

Six Critical Skill Sets for Writers

Although the technologies and the processes for doing our work has changed tremendously, the managers in my study helped me see that there are roughly six basic-yet-critical technical communication skills. Depending on the specific job, many other skills can be essential as well. That said, the following skills emerged as critical:

- *Data Gathering/Problem Solving.* Audiences often arrive at online help or documentation in a frustrated or frenzied state. They want to resolve a problem immediately, and new writers must anticipate their questions and communicate the answer clearly and succinctly. As such, writers need to learn about different audience profiles, and they must be solution-oriented. They must see their work as answering end users' questions quickly and succinctly. Also, don't underestimate what you can learn from a preproduction version of software, a beta device, or an early prototype.

- *Detail Orientation.* Pay attention to detail. Follow the approved style guides. Engage with several levels of editing to help your audience and to free your work of errors. A writer's work requires quality control because it reflects directly upon the professional ethos of their organization. Proofread, proofread, proofread!
- *Organization.* Writing effective technical instructions means breaking concepts into simple, discrete, and organized tasks. Organization during a time of change is crucial.
- *Project Management.* Also imperative is the ability to break down a project in terms of time, people, and resources. An effective writer must prioritize work and estimate timelines. Especially during times of change, writers must determine who is best capable of taking each piece as well as determine any other resources required.
- *Teamwork.* In my research, the skills managers crave above all others are for their writers to work well and excel in a team setting. Also desired is the ability to transform dysfunctional behaviors into more functional ones or to at least be able to operationalize problems, avoid distractions, and keep on schedule.
- *Written and Oral Communication Proficiency.* Proficiency of grammar, usage, and mechanics is vital to a writer's daily work; simultaneously, they must be advocates of their end users' needs. Writers are often challenged because our work is often no longer a start-to-finish print manual, but rather dynamic digital pieces of content serving a multitude of audiences at any time and any place. Also, during times of change, effective written and oral communication becomes the lifeblood of moving forward positively and professionally: every word matters.

Six Core Competencies Writers Need to Weather Change in the Workplace

In addition to these skill sets, there are also a number of core competencies that help technical communicators to better weather the changes ahead. They are as follows:

- *Collaboration.* Yes, it's worth repeating. Collaboration is essential. Writers must learn how to work, respect, and appreciate diverse individuals to allow for unit and organizational growth.
- *Flexibility.* New writers should have an open mind to new ideas, new processes, and diversification. Be positive, resilient, kind, and adaptable. When possible, try to anticipate change and plan for it, rather than simply react to it.
- *Innovation.* Managers desire intelligent, creative solutions to complex issues. Experiment and innovate!
- *Patience.* Another key competency is patience. Writers should be prepared not only to be flexible, but also to roll with change. Even though it may be difficult to accept or embrace change or the pace at which it arrives, try not to burden yourself or others with things beyond your control. Also, be sensitive to others' adjustment processes, particularly those who have been with an organization for several years or decades.
- *Personal Mastery.* The best way to weather change is to ask questions and be led by inquiry and curiosity. If you hold a continuous improvement mindset with a strong work ethic, you will be recognized. Be compassionate, professional, quality-oriented, adaptable, and a lifelong learner, especially during times of change.
- *Systems Orientation.* Perhaps the hardest competency for new writers is understanding the bigger picture—the organizational mission, goals, and structure. Learn about the organizational structure and the history of an organization before you suggest any change. To be ready for change, writers must always know how to clearly articulate the value they add to the organization. Additionally, travel the world, read often, engage your creative outlets, and let those experiences begin to help you understand different cultures, perspectives, and paradigms.

Armed with this knowledge, new technical communicators may be better prepared for change, and they could serve as role models to other units. As technical communication scholar William Hart-Davidson once noted, "the knowledge and skills of technical communicators [are], indeed, in high demand at the highest levels of technological decision-making: research, policy, business planning, management, and design." Hart-Davidson also posits that writers are routinely called upon "to directly contribute to the most valuable aspects of company's business and an organization's mission."

It's truly up to all of us to guide our new writers to not simply navigate the waters of change, but to craft the words of change that best serve organizations, clients, and stakeholders. Then, writers can forever shed the "Tina the Brittle Technical Writer" stigma and instead emerge as strong, indispensable professionals who will lead and succeed.

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"Get Me Out of Here!":

Networking for Women in Technical and Professional Communication

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By EMILY JANUARY PETERSEN

LARGE CROWDS CAN be intimidating, and technical and professional communicators often describe themselves as introverts. Many of these practitioners are likely female, but they may also be surrounded by male coworkers in male-dominated organizations, making them a minority among their peers. Sam Dragga noted that "women's dominance of the field … is neither representative nor indicative of business and technical occupations. The segregation that has traditionally limited women's access to business and technical disciplines, while diminishing, still prevails." The results of such "feminization" typically see males concentrated in the highest status positions and earning more pay than their female counterparts, according to Pamela J. Creedon.

Of the 39 women I have interviewed about their workplace experiences with the feminization of the field in mind, most of them know that networking is important and a way of addressing possible power imbalances within the workplace. However, few of them enjoy networking, and many of them admitted to not networking much because "I'm not good at it" or because they are not in need of new employment. Helen admitted, "I went to the [conference's] cocktail party and left because it was too crowded for my taste. I just I couldn't move, you know. I couldn't find a place to sit, and I was just like get me out of here so I went back to my hotel room and watched Netflix on my computer." Kim shared, "I'm a very introverted person, so my basic inclination under most circumstances is to go home and shut down." She joked, "How do you know when you are talking to an extroverted technical writer? She's looking at *your* shoes."

While networking may be hard for those inclined to this profession and for women in general, we know that it is vital to career success for many reasons. The women I interviewed had innovative suggestions for building networks and cited reasons for doing so other than a need for new employment. This article presents, according to these women, why networking is important and which techniques work best for making the most of networking.

Reasons for Networking

Networking is important for many reasons, but as scholar Jia Wang suggests, "women do not have equal access to social capital because they are often excluded from the social networks most important for power acquisition and career success." Knowing who is in power and connecting one's self to those people allows women the ability to join and have access to networks of power. The number one reason women cited for networking is to get a different or better job, and social capital certainly helps in this situation. If you are well connected, you have a better chance of hearing about job openings and of getting references within targeted companies. Kim said, "there was a period of about 10 years when I could truthfully say that every job that I had gotten was in one way or another because of STC networking and being visible in the community."

However, networking is additionally beneficial because of its potential for making us aware of best practices and knowledge in the field. Emma noted, "Nobody needs to figure these things out for themselves…. [R]each out to a few other writers … [when you're] stuck." Sharing knowledge with each other, and therefore mentoring and guiding each other through the different phases of our careers, is another pertinent reason for creating a network.

Best Practices for Networking

So what are the best practices for networking, especially for women? According to the women I interviewed, they cited volunteering, socializing, online social networking, making in-house connections, and being brave and creative.

Volunteer

One woman noted that while she's been actively involved in networking through STC, she has found that the volunteer opportunities through that organization are most important for her network and for her ability to recommend others. Katrina stated, "There are a couple people who are looking for a job. One is about to graduate, and I've worked with her on the [STC] conference and I would totally be a reference for her, because I've really seen what she can do as a worker based on her volunteer work…. I feel like that's the best way to network." Volunteering does what most of the women suggested: build relationships. Anna said, "I try to do more relationship building than just collecting names." Networking relationships become more meaningful when you have worked with a person on a project and you get to know them well.

Brenda's work in technical communication involves advocacy, so she volunteered for legislators in order to become friends with them. She said, "Anytime I have an opportunity to do that I usually try to take it. I like getting to know people, and I'm not actually particularly fond of small talk, so my objective is always to get past that point of small talk and then have an opportunity to ask people to lunch or go meet them at their office."

Socialize

While volunteering might not be feasible for you, socializing should be. Anna, in her quest to build relationships with her network, suggested talking to people wherever you go and meeting up with people, for coffee or lunch. She excitedly talked about meeting another technical writer: "We'd connected through [a] mutual acquaintance and he just wanted to know what my thoughts were on technical communication in general in the industry, and we talked for 30 minutes and it was cool because … we had such a great conversation." She extends this friendliness to any connection, whether

online through social media or email or face-to-face at a conference. "I always try to answer them because you never know when somebody is going to be an asset to you later as well as me being a benefit to them."

Online social networking is another form of socializing, one that introverted practitioners may find more accessible. Kim mentioned, "I'm sort of loosely in touch with a ton of people through Twitter. I don't know what proportion of my Twitter friends are in technical communication. I'm going to guess it's about a third, so that's probably three or four hundred people." This virtual meeting place gives women the opportunity to support each other and know each other without the expense of travel. Anna said, "I really love meeting people on Twitter or online or something and then actually getting to meet them in person at a conference. It's so cool. You feel like you already know the person." This was important to her because of her responsibilities as a mother, meaning that she doesn't often have time to meet people in person at networking events. Twitter and other social media outlets bridge that gap of time and geography.

In addition, social media networks often include private groups, meaning that women can create their own organizational space for sharing ideas and best practices with each other. Renee called it "weak networking;" however, studies of online communities, such as May Friedman's, have shown there are numerous benefits to participants and that these virtual communities are important for women, especially mothers, whose time and ability to travel may be limited. Online networking can also soften the awkwardness of self-promotion, which is an uncomfortable part of joining any community or landing a new job. For those who may feel uncomfortable making face-to-face connections, online social networking with career goals in mind can alleviate that stress and produce the same results in terms of people met and connections made. In fact, such networking can make connections more meaningful and lasting, especially if your interaction with the online groups occurs daily and you get to know one another over time, rather than over one conversation.

Besides virtual communities, we can seek out and be aware of work-related communities within our geographic areas. STC often has local chapters, but Elizabeth noted finding a user design scene in her area, where she attends happy hour. Milly suggested looking at Meetup.com, on which she found many groups that applied to her work, including one for women in start-up. Caroline also mentioned finding and attending meet-ups, where she has found some women in technology groups that interest her. Lily noted being a member of an information development meet-up group in her area. "We meet and actually have presentations. I'm actually giving the presentation next week about content development." Not only is she gaining new knowledge from attendance, but she has a chance to improve her presentation skills through this opportunity. Networking in groups like these can become professional development opportunities.

Connect

Finding connections within a company, especially larger corporations, may be the single most important networking a technical communicator can engage in. While large companies often employ many technical and professional communicators, they do not necessarily work together. They often find themselves on different teams, in different cities or states, or even in different countries. Technical communicators are often the lone writer on their teams, and reaching out to others within your company is a productive way of building a network that allows you to speak about proprietary information and construct best practices.

Carmen took the initiative to do this at her company. She said, "If I knew that there were other tech writers or similar in the company … I would just start looking through company personnel directories or searching for job titles that said anything like technical writer, communicator, document specialist, or something similar to kind of find out where everybody else was. I wanted to know where my peers were and build a little mini-network within the same company so I would have other resources, like somebody I could reach out to and ask a question." She made this more formal by asking the IT department to create an email distribution list for the people she connected with, and they would share ideas and information with each other. This is especially helpful to the three people her company employs in Canada, who are

Finding connections within a company, especially larger corporations, may be the single most important networking a technical communicator can engage in.

spread out over 500 miles from each other. She instructed these coworkers, "If you don't have somebody down the hall that you can go and ask questions, you can send this to our distribution list and send it to like 30 technical writers in the company at the same time." She found that people appreciated her creation of this network, and that this act is especially helpful when beginning a new job.

Emma engaged in a similar project. She reached out to the other writers in the global company she works for and expanded it into a best practices group. "We have meetings and we have a monthly newsletter we've produced and … we reach out because [no matter which division you work for], the technical writing challenges are so similar. We've

all been able to vent or share tips, and when we have successes we get them out there to hundreds of other writers." Her efforts to network within her company have led to a formalization of the group and ways for the writers in the company to learn from each other.

Melissa, an active participant in an employee networking group, said, "I have quite a bit of fun at work. I do all those networking groups, and it's really pretty good because I get to meet people from all different parts of the business and at different levels, and they're interesting. If I didn't do the networking groups I would never know them." Not only should we find connections with other technical communicators in our companies, but we also can make interdisciplinary connections and strengthen relationships with subject matter experts and other employees relevant to our work.

Networking does not always have to be about work.

Mabel's women's group at her company has the goal to visit high schools and middle schools and encourage girls interested in STEM. This networking is a cross between getting to know people within your corporation and using combined knowledge to volunteer within the community. A vital part of networking is being willing to mentor or help those you might come in contact with, especially younger students or practitioners.

Be Brave and Creative

The best advice I ever got was "Be brave!" The women who have learned to network more effectively than they have in the past suggested the same thing. Dina recounted advice from a professor, who said "Don't take no for an answer" and "What's going to happen if she says no? Is she going to burn down your house? Is she going to kill your cat? Or is she just going to say no and you're going to move on?" Dina found that reminding herself of this helped her to be more comfortable approaching people and asking for help through networking.

Networking does not always have to be about work. Melinda started a weekend tennis team, noting that her life as a busy soccer mom and full-time employee made it necessary for her to find an outlet. She said, "There were no opportunities for working women to play tennis, which is crazy! It was only for women who are home all day, so I knew there were other people out there—other working women that wanted to play tennis—so I worked on it for a couple of years, and I was able to get a team together last year. We won our league and went to districts." She found friendship and satisfaction by starting this league and likely made many meaningful connections with other working women.

Networking is vital for women to connect with and support each other in their career goals.

Conclusion

Networking can be a daunting task for technical and professional communicators, yet it is vital for women to connect with and support each other in their career goals. It is also necessary for women to connect with men. While the women I interviewed often avoided and disliked networking, their suggestions for making meaningful connections can help to alleviate that anxiety and foster ways for all personalities to find what works for them. Networking can and should be enjoyable, beneficial, and ultimately fun.

Note: All interviews were conducted between January and May of 2015. All names used are pseudonyms.

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Intercom 2016 Editorial Calendar

Issue month	Submission due date	Issue Theme	Keywords and Writing Prompts
January	11/1/2015	Professional Development and Certification	What is the importance of certification? What does every technical communicator need to know about project planning, review and editing, project analysis, visual communication, content development, content management, organizational design, production and delivery, & written communication?
February	12/1/2015	Communication Trends	What are the current trends in communications? How do communicators work (i.e., via hyperconnectivity, global teams, open development)?
March	1/1/2016	Instructional Design	What should technical communicators know about elearning, distance learning, adult learning, edutainment & gamification, informal learning vs. classic instuction?
April	2/1/2016	Grand Hardware Documentation	How are very large things (airplanes, nuclear reactors) documented? What are the policies and procedures for large complex projects? What project management and tools are being used for grand hardware? What is the difference between documenting very small things?
May	3/1/2016	International Technical Communication	How do boundaries (political vs. geographical/physical) affect technical communication? What are the attitudes toward technical communication internationally, and do other cultures experience the same problems/goals? How are distributed teams using social media and other productivity tools to build global relationships? How is technical communication valued outside of the United States?
June	4/1/2016	Technical Communication on the World Wide Web in 2016	What is new in 2016 for technical communicators working on the Web (i.e., responsive design, accessiblity, new help system frameworks, tools/processes for publishing Web content, the internet of things, big and small data).
July/ August	5/1/2016	Teaching Professional & Technical Communication	How is technical communication taught nationally and internationally, and for audiences transitioning from a campus to a corporate environment (e.g., service learning)? What is the current curriculum development like in certifiable world? What is the difference between teaching and training in tech comm?
September	7/1/2016	A Deep Dive into Tools and Workflows	What new tools and workflows are technical communicators using (i.e., Agile, Bootstrap, Jekyll, GIT, GIT HUB, Swagger, etc.)?
October	8/1/2016	Talkin' 'Bout My Generation	Generational profiles at different career levels, 5-10 year plans, advice for those who choose this career, perspectives from different generational groups.
November/ December	9/1/2016	Tech Comm Guru Profiles	Experienced technical communicators will be interviewed about their technical communication career paths and what they think the future of the field will be.

Reminder of Deadlines for Awards and Honors

THE DEADLINES for nominations for many of STC's awards and honors are upcoming. Please see the STC website, www.stc.org, for more information or to find out how to nominate someone.

- Associate Fellow Recommendations: 1 October
- Fellow Nominations: 1 October
- Sigma Tau Chi and Alpha Sigma Honors Societies: 26 October
- Jay R. Gould Award for Excellence in Teaching Technical Communication: 1 November
- Ken Rainey Award for Excellence in Research: 2 November
- Distinguished Community Service Awards: 25 October
- Community Achievement Awards: 29 January 2016
- Community Pacesetter Awards: 25 March 2016

Letter to the Editor

MadCap Flare Has Supported the Authoring and Publishing of Bi-directional Content Since 2013

We would like to clarify an incorrect statement that appeared in an article titled "The Latest and Best Features in Adobe's FrameMaker 2015," from Jang F.M. Graat in the July/August issue. In this article, Graat states:

> *"product manuals or Web pages might contain text in multiple languages on the same page. This implies that one language direction switch on the top level, as is the case in Madcap Flare, is not going to solve the issue. True RTL language support requires support for bi-directional content…."*

This is a misleading and untrue representation of MadCap Flare's functionality. MadCap Flare does natively support both authoring and publishing of bi-directional content, namely right-to-left (RTL) languages such as Arabic, Hebrew, and Persian together with left-to-right (LTR) content. In fact, this functionality was introduced by MadCap in early 2013 with the release of MadCap Flare 9.0.

In Flare, bi-directional content is not only supported at the project level, but down to the topic, paragraph, and sentence level. A single topic, for example, can contain any number of languages. Furthermore, if a single sentence contains both LTR and RTL languages, Flare will treat each language appropriately in that sentence.

Flare also includes options to help convert projects that may have been translated into Arabic from English, for instance, but not natively authored in the RTL language. Some of these options include Invert Styles, Invert Page Layouts, and Invert Image Callouts.

For more information, visit *www.madcapsoftware.com.*

—Francis Novak, VP, Product Management

Share Yourself with *Intercom* Readers

WE'RE LOOKING for members to contribute a first-person column for a future issue of *Intercom*. The magazine has a trio of member-focused columns: My Job (your day-to-day work), Off Hours (discussing your hobby or side gig), and Looking Back. My Job takes a look at the day-to-day work of an STC member and what makes the job interesting, fun, or unique. Off Hours is a look at the side jobs and hobbies our members have. And Looking Back focuses on senior members providing perspective earned throughout their career. Would you like to share your story with *Intercom* readers? Email Assistant Editor James Cameron at *james.cameron@stc.org*, for more information, samples, and to volunteer!

Envision, Implement, and Enshrine: Technical Writers as Change Communicators

BY THOMAS BARKER | *Fellow*

MANAGING CHANGE is something that all technical writers will be part of, either because their publications departments undergo restructuring, or they are asked to contribute their communication expertise to the a change effort. Or, in the role of executives, publication managers or communication professionals may themselves lead change initiatives in their organization.

Whatever the writers' role, knowing the basic elements of change can help you know what to; knowing the principles of technical communication can help you manage expectations in your favor. In this article we will address the change process itself and see how the work of technical writers suits them well for a slightly different role.

What Is the Change Process?

In its simplest form, the change process involves three broad phases: vision, implementation, and evaluation. The vision stage starts the ball rolling. Someone sees a better way to do business, a way out of a problem. This vision gets implemented through structural, organizational, political, and cultural realities. Finally the vision becomes "the new normal" and and the leadership can measure the success of the change initiative. But what happens along the way complicates this simple model.

Along the way leaders find that they have to engage other people, share visions, build coalitions, hold meetings, and do all the things leaders do to get from point A to point B. The starting point is usually the first item in the golden list: vision, coalition building, planning, doing, evaluating, institutionalizing.

John Kotter, writing in the *Harvard Business Review*, building on these three basic stages, identifies the following eight steps in the change process.

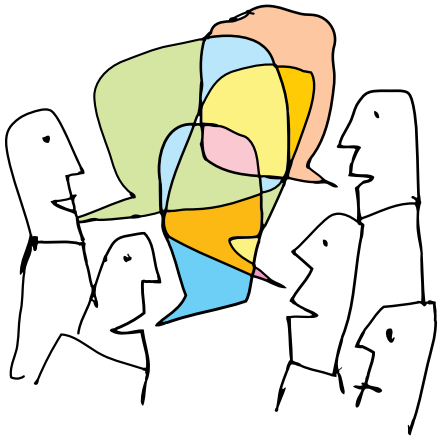
- Establishing a Sense of Urgency
- Forming a Powerful Guiding Coalition
- Creating a Vision
- Communicating the Vision
- Empowering Others to Act on the Vision
- Planning for and Creating Sort-Term Wins
- Consolidating Improvements and Producing Still More Change
- Institutionalizing New Approaches

The steps that Kotter outlines emphasize the role of communication in the change process. Unlike other human activity, communication records, reflects, and motivates. Communication is perfect for change processes where beliefs, values, and goals must be questioned and revised. As Malcolm Gladwell said, "Innovation—the heart of the knowledge economy—is fundamentally social."

Understanding technical communication processes and practices can help writers navigate and enhance the change process.

Understanding Change Audiences

Technical writers are used to analyzing the informational needs of technical readers. What's more, they



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are used to adjusting information to readers' needs so that jobs get done efficiently and safely. Technical communication is about helping people work. Change communication is slightly different.

Unlike technical accomplishment, change rides on a current of belief and understanding. People resist change or, to put it more accurately, they resist being changed. Change occurs at very personal, cultural levels for some people. It occurs at the level of their beliefs: in how things are done, who should do them, and who is in control of the whole doing process.

Audience analysis has to shift from task orientation to motivation. What motivates the reader? What is the starting point and what is the goal? Why are things done this way and how can that be questioned? These are the audience analysis questions in change communication.

In change mode, the goal is not to reinforce activity, but to re-envision activity. In change mode, existing relationships with readers need to be reconsidered. Whatever functional relationships you had before needs to be rethought when you engage in coalition building.

This column focuses on a broad range of practical academic issues from teaching and training to professional concerns, research, and technologies of interest to teachers, students, and researchers. Please send comments and suggestions to *ttbarker@ualberta.ca.*

The reactions that colleagues have typically had with you may be different now. You may have had minimal contact with procurement, but since the new department you are proposing requires supply expertise, you need to approach people you may not have ever spoken to before.

From a strategic perspective, you may face cultural issues, generational issues, as well as knowledge issues. Rhetorically, you have an ethics issue. How can you establish trust? How can you overcome the "I'm busy right now" dodge that can swamp a change initiative?

Understanding Change Planning

Technical communicators are planners. They plan documentation projects, and they plan corporate communication initiatives. They know that good planning leads to concrete results, and they know that following standard processes creates consistency and builds professional practices. Change communication planning is like this, but slightly different.

Planning change means inventing a vision-driven strategy and being able to shift given the feedback along the way. The key is to be agile, take feedback, and grow in the direction of positive results. The plan that cannot change is the plan that will most likely fail. The reason change plans can themselves adapt is that they need to be vision driven. Lack of a leader's vision dooms the plan and any programs surrounding it.

Plans for change need to re-envision existing communication channels. How can newsletters, email updates, and progress meetings focus not on boring work accomplished, but on how the work did or did not contribute to the vision of change? How can reactions of those who might want to block change be analyzed as to whether they support the vision or not?

It's not about what works, but about what *contributes*. It's not about what sells, but about what moves the initiative forward. The mindset of vision means that planning should embody stages toward a clear goal; the mindset of "business as usual" means that visions, and the programs they create, die along the way.

Change communication means identifying existing visions and missions and shaping strategies, coalitions, teamwork, and other elements of implementation around that vision. Initiatives that fail do so because the clarifying vision did not drive every aspect of the implementation work.

Kotter talks about "short-term wins." Short-term wins are events that, when planned well, embody the change vision and provide energy for continued change. Short-term wins result from short-term goals. Short-term goals need to be visible, measurable, and incontestable. If you have an employment satisfaction measure in your company, maybe a goal might be to tic it up a notch by the end of the next quarter. When resisters see that tic they might think twice about joining the coalition of "do nothings" or "foot draggers." Short-term wins create good news that everybody likes to hear.

Making It Permanent

Technical writers know how to institutionalize knowledge. Reports, proposals, briefings, and white papers both contain and constitute the history of knowledge in organizations. These forms or genres of writing create a legacy of understanding and vision that can single-source the future. Change communication is slightly different.

Change communication focuses more on policies than on reports. Policies, in the form of political briefs, insurance standards, certification requirements, and performance reviews are where change comes to drive the future. The reason communication is so important in institutionalizing change is that it shifts the emphasis from the leader to the company.

In the project I'm working on with the Ministry of Human Services in Alberta, a change in the wellness culture in human services might be identified with the dynamic team of individuals that is currently driving the process. What happens when those leaders move on to other projects? Without some educational initiatives, revised insurance categories, or updated certification standards—not to mention legislation—the initiative is liable to become a beautiful memory.

Change communicators realize that success needs to live on in the corporate culture and in the system of beliefs in an industry. In the past, for example, occupational health and safety used to be seen as a cost drag, an unproductive effort, and a training nightmare. Now, especially in construction trades, health and safety are part of the very culture of work. Safety is your first hour on the job. What this means is that communication (reporting, meetings, training) is built into the culture of the workplace. Change isn't a poster on the wall, it is the wall itself.

For the technical writer, audience analysis, communication planning, and reporting are second nature. Know the setting of information, know how information moves and supports work, and how it forms a knowledge culture is the bread and butter of the industry. These instincts serve well in a change setting. Change communication thrives on the beliefs of individuals who see a vision and take on a challenge. It builds on strategic planning that tics off real accomplishments. It lasts because the vision that sustained it gets built in to the structures of policy, evaluation, and reward. For technical writers who are not afraid to take on something slightly different, change communication provides a chance to envision, implement, and enshrine. i

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Out of Time: A Double Feature on Expeditious Ethics

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BY FER O'NEIL and **JOY COONEY**

Case 1: Down to the Wire
By Fer O'Neil

SecCorp's long-awaited update to its flagship product, SecControl, has kept its technical writing team busy. The product includes server management software for monitoring and controlling certain functions of industrial machines. In the weeks leading to the update's release, the team has been updating product specification data sheets, installation and user guides, and all the public-facing online help available on the company's website. Chris has worked with SecCorp's software developers, engineers, and quality assurance team (QA) to document new on/off control functionality. Currently, customers can remotely control nearly all functions of their machines—only starting or stopping requires manual intervention. The updated SecControl will increase efficiency by allowing customers to program start and stop times.

Unfortunately, after working with QA to document this new feature, Chris determines that it does not work properly for customers whose servers are running the latest OS version. For these customers, the machines unexpectedly start after a few minutes. Based on user scenarios, Chris knows that workers servicing the machines take an average of five minutes to complete their tasks and that any unannounced start of the machines will put the workers in danger of being harmed.

Chris emails the marketing, communications, and public relations departments to confirm whether the on/off bug has been resolved and whether this information should be excluded from the release documentation. Knowing that the release is scheduled for tomorrow, Chris keeps his email brief: he states the facts he has compiled, but adds his concern that this situation needs to be promptly addressed. He also copies his direct manager on the email.

Within the hour, Chris receives a reply to his email stating that the prevalence of the on/off bug is known, but that since such a small number of customers could potentially be affected, the release is still scheduled for the morning. The email indicates that Chris's concern is understood and that an immediate service release to resolve the issue is in the works and planned for release within a week. Furthermore, internal analytics show that less than 1% of customers run the latest OS, and it is unlikely that they will update to the latest version before a week's time anyway. Therefore, the number of customers affected by the bug is virtually zero. Chris's manager replies shortly after and writes, "I'll instruct my team to remove this information at this time—thanks."

Chris must decide whether to include the change log information detailing the known issue with the bug, and also, perhaps, a warning message to those customers running the latest OS. Including this information, however, will contradict his direct manager's explicit instructions. Furthermore, publicizing this "internal only" and "confidential" bug will impact his company's image, sales, and potentially even his job.

It is 4 pm and all of the stakeholders will be gone by 5:00 PM. The release will occur as soon as SecCorp opens in the morning. What should Chris do?

Case 2: Food for Thought
By Joy Cooney

Amy and Tom formed Athens Communication Team (ACT) with the primary purpose of doing work that would promote social responsibility. Now in its third year, ACT has a small but stable clientele and a

This column features ethics scenarios and issues that may affect technical communicators in the many aspects of their jobs. If you have a possible solution to a scenario, your own case, or feedback in general, please contact Derek G. Ross at *dgr0003@auburn.edu.*

solid reputation. However, the partners will soon have to dissolve the company if they can't bring in more revenue.

Amy and Tom meet with Ed, an executive at Western Food Producers Coalition (WFPC). WFPC represents independent farmers and mid-scale food producers across the West. Ed explains that WFPC has kept silent on the genetically modified (GM) food labeling debate because its members have been divided on the issue. However, they now want to join the industry push for Congress to require FDA guidelines for GM labels that manufacturers could use voluntarily.

WFPC wants ACT to write promotional content for its members to use, and Ed needs an answer immediately. Amy and Tom agree to make a decision by morning.

Tom says he is worried that working for WFPC to promote voluntary labeling of GM foods will detrimentally affect ACT's reputation. He thinks accepting the job would be bad for business, but Amy is unsure.

Amy reminds Tom that this could be their biggest job yet, giving them exposure and potential for more contracts. Tom says, "Even if this job is good for business, we might decide it's not socially responsible. We agreed to stick to our mission."

The partners turn to the Web to read more about the pros and cons of voluntary GM labeling. Tom learns that state-mandated labels will likely increase food prices more significantly than voluntary labeling. He thinks of his friend Linda who struggles to maximize every dollar in her family's budget. Tom wonders what kind of impact even a small increase in food prices could have on hundreds of families in his community alone.

Tom and Amy decide that helping to keep food costs down will benefit vulnerable populations who already struggle to pay for the food they need. They decide that promoting voluntary labeling is socially responsible and think they might accept the WFPC project.

Amy continues to browse the Web. She reads an Associated Press article which warns that a federal standard for voluntary GM labels "would get manufacturers off the hook if any states pass laws requiring mandatory labeling." She wonders if WFPC is joining industry leaders in a preemptive maneuver to sidestep potential mandates.

Voluntary labeling proponents claim that a federal standard would be uniform and therefore less confusing than state-by-state standards. Tom likes the clarity and consistency of having one standard, but he thinks that voluntary labeling will ultimately make it harder for consumers to know what is in their food because few manufacturers would voluntarily re-design packaging to include a "Made with genetically modified ingredients" product label. ACT advocates for right-to-know initiatives.

The partners think about ACT's revenue and reputation, and they contemplate vulnerable populations and their need for affordable food versus their right to know what is in it. With only a few hours left to make a decision, Tom and Amy are again unsure which way to vote.

What should Amy and Tom do?

Editorial Note

When we think about ethics and ethics cases, we often have the luxury of time. We mull over the choices we would make in difficult situations and generally try to consider the implications of the various courses of action we might choose. Sometimes we take days, weeks, or even months to come to a decision that feels right. More often than not, however, our day-to-day lives don't allow us the luxury of extended contemplation. Deadlines loom, and, like it or not, choices must be made.

In May's special issue of Intercom *on ethics, our authors gave us a lot to think about—the future of health care, public visuals, "other" knowledge, experience architecture, and more. In our column this month, we present two cases dealing explicitly with the problem of deadline-induced decisions that I hope will help us think more specifically about our daily decision-making process. In the first case, Fer O'Neil asks us to think about the choices we might make when faced with the possibility of harm to our clients, an order from a manager, and a looming deadline. In the second, Joy Cooney asks us to consider what value system might win out if we had to choose between our business acumen or our moral highground. The two together offer us, I think, a rich set of cases for our combined consideration—where do we place our own privately held values when decisions absolutely must be made at work?*

As always, we welcome and encourage your responses. Let us know your answers to the questions we've posed, your thoughts on our roles as technical communicators in general, or send us your own ethics cases or column ideas. Please send your responses to derek.ross@auburn.edu. *Responses will be printed in an upcoming issue of* Intercom *as space permits.*

—Derek G. Ross

Shared Concerns

1. In case 1, does the low possibility that many customers will be affected let Chris off the hook? In case 2, does the large number of potentially affected people increase Amy and Tom's struggle?
2. In both cases, the decision makers could likely find a way to write an explanation for their decision in a place where stakeholders and constituent audiences could find it. Would a public justification for their choices help offset any potential problems caused by their decisions?
3. Both cases could potentially lead to unequal information in which the users or consumers know less than the companies behind the products. To what degree are technical communicators ethically obligated to minimize inequality?

FER O'NEIL *and* JOY COONEY *are graduate students at Texas Tech University.*

Constructing a Better User Experience:

Site Visits and User Shadowing

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BY BRIAN STILL | *Member*

I WAS FORTUNATE to attend a talk in the latter part of May where one of the leaders of User Experience (UX) thought, Dr. Tharon Howard, taught a master class examining the differences between our usability approaches in the past and our UX approaches now. Whereas we once adopted an accommodationist approach to researching users, we are now in a position where we are attempting less to make products work for users and more construct a situation that better "allows them," according to Howard, "to successfully experience the interface."

For those of us who have employed usability testing in the traditional way Howard describes as accommodating, it has in many ways often felt like a zero-sum game. Our relentless focus on finding and fixing bugs, although retaining some value, has become less satisfying for us and for those we are providing solutions. As people like Ginny Redish, Mike Albers, and Howard have been telling us for a while, it is increasingly the case that complex systems, which really describe almost any mobile interface or application we make and use, resist simple fixes. One set of bugs found and fixed often give way to new sets of bugs found and fixed. And one person's bug isn't necessarily another's. Even researchers, which Rolf Molich demonstrated in an insightful 2004 comparative study, often don't find the same problems or recommend the same solutions. Maybe this is why Lane Becker didn't hesitate at roughly the same time in calling most usability testing worthless.

Of course, it isn't worthless to test the usability of a product, especially if the alternative is not to test it and then just hope everything will be alright. At the same time, to understand the user experience (UX) is not the same thing as to test for product usability. So much more goes into UX, and over the last decade or so many of us have committed more time to mapping the user experience, either in an effort to understand what might be ineffective about an existing product, or to design one from its very inception to be effective. Rather than seeing a product as an unfinished sculpture that needs final chiseling to remove blemishes and give it a perceivable shape, those of us interested in the user experience are seeing the product as part of that experience. We cannot focus solely on the product's shape when the knowledge, expectations, and experiences—the mental model—of the user are the prism through which they see and use the product.

We don't just want to ask, "can a user do something with a product?" As soon as we fix the product to let them do that task, there will be something else they will want to do, or the environment of use will change how they can do it. Instead, we want to know the following:

- How do users think and interact with a product?
- What do they require?
- What have others done before, both bad and good, to engage users?

This column examines the ways technical communicators contribute to the development of more usable products, especially those used in complex, dynamic environments. Novel usability evaluation methods and design techniques, as well as those rediscovered or repurposed, will be the focus. Please send your comments, questions, and suggestions for future articles to me at *brian.still@ttu.edu.*

- What does the company want to accomplish with the product they are making for the intended users?

UX is the whole onion, layer inside of layer. As this useful diagram below details (referenced from a 2008 nnGroup Amsterdam conference presentation), UX is, in fact, usability, utility, brand, and so many other things that constitute the dynamic environment where the user interacts with the product (see Figure 1).

The problem, and one Howard noted in his presentation, is that we're short on research methodologies to make UX feel as effective as traditional usability. Yes, we can always iterate testing, but often clients only want or only give us enough time for one test. Lean UX, as I noted in a previous *Intercom* column, shows promise because it allows for short, hypothetically-based testing meant to construct insights into UX, especially in Agile development frameworks that have rapid sprints (two weeks or less) from one product creation stage to the next. Howard emphasized the value of user journey maps as comprehensive first efforts, and I've also highlighted their capabilities (also in a previous *Intercom* column). But since I have previously discussed journey maps, I wanted to use this column to touch on a couple of other methods you can make use of when attempting to construct a more useful understanding of UX: site visits and user shadowing.

Site Visits

Carol Barnum writes that to learn about users, "you must first observe users, then talk to them, and match what they tell you with what you see and comprehend." The site visit offers an ideal way to accomplish this, allowing you to interact with users carrying out real tasks in real situations. St. Mary's University Press in Winona, Minnesota, depends so much on the information gained from site visits that it requires all of its customer-contact employees, from those taking orders on the phone to executives, to carry out up to ten site visits a year.

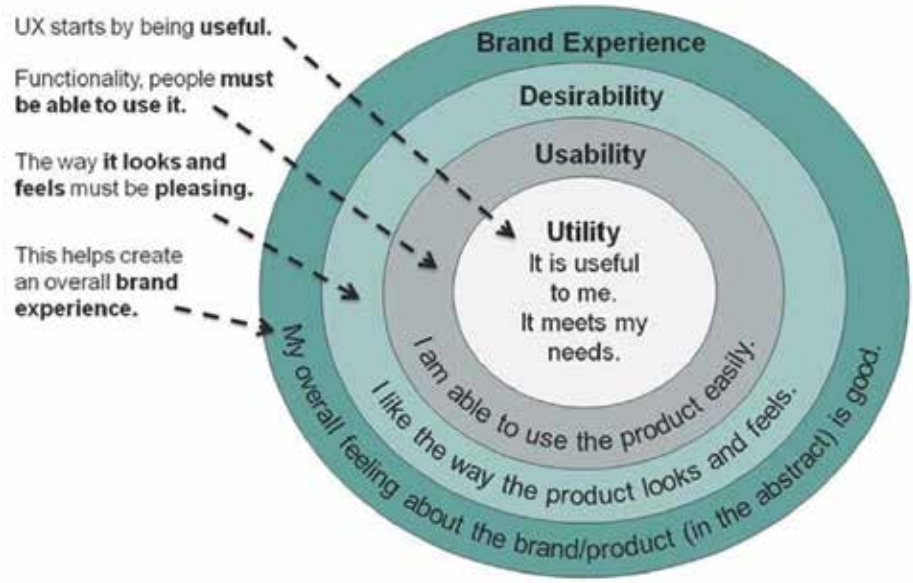
Of all the methods aside from actual user testing, site visits are the most intensive, perhaps also the most expensive, but they are also typically the most rewarding. Your sense of the use environment can also be measured against what it's really like.

So how does the site visit work? There are many different approaches, and you can limit the time to a couple of hours (you might hear this called a discount user observation), or you can elect to carry it out over a period of days. You literally want to go on site and observe users in action, doing what they typically do, how they typically do it, and where they typically do it. One of my most informative site visits was when I conducted a ride along with a state trooper a few years ago. I was consulting for a software company interested in creating a new app for law enforcement. To understand how it would be used and thus designed, I needed to know in what context it would be used. So I rode along with the trooper for a number of hours. I never could have recommended to the company what needed to be included in the design of the software to account for all of the distractions the trooper faced, such as the need for audio to impart messages as opposed to long text phrases that are difficult to read when driving and observing.

Be prepared to take notes, collect audio and video if possible (photos will work as well), make drawings if need be, and even bring back copies of artifacts, such as tools, books, or other resources that the users make use of while they work. You will want to ask them questions. Every good site visit offers a collection of triangulated data—user verbal feedback, your observations, and performative data, such as the actions or tasks they carry out. If users cannot speak to you while they work because what they are doing would be distracted by talking to you, ask questions after the fact or retrospectively.

If we plan to recruit users for a user test, a good site visit or series of site visits form the basis of user profiles we recruit from, as well as tell us what kinds of tasks and scenarios we should use in testing. Site visits also help us as we design new products because we understand better how users actually use the existing product or similar ones. Ultimately, a good site visit collects three things:

- User Analysis—knowledge about what the user does, thinks, and says.
- Task Analysis—observations of every task and subtask performed.


UX starts by being **useful.**
Functionality, people **must be able to use it.**
The way **it looks and feels** must be **pleasing.**
This helps create an overall **brand experience.**
Brand Experience
Desirability
Usability
Utility
It is useful to me.
It meets my needs.
I am able to use the product easily.
I like the way the product looks and feels.
My overall feeling about the brand/product (in the abstract) is good.

Source: User Experience 2008, nnGroup Conference Amsterdam

Figure 1.

- Environment Analysis—documentation of every environmental thing—noise levels, light, size of area, objects in the area, resources used for support, and interruptions that occur. It wouldn't hurt to bring back artifacts of things the user relies upon or uses (take photos of these if necessary).

User Shadowing

The user shadowing method falls somewhere during the site visit, when you are actively engaged with the user as a non-intrusive observer. A lot of method actors in preparation for movies carry out user shadowing. If you want to play a cop realistically in a movie, you act like the cop, imitating the cop's actions, language, and other key activities. The idea then is that when it comes time to act in the movie, your mannerisms and words will be more realistic.

We use shadowing when we want to try to understand how users are thinking as they do something. And rather than engage them, say via a site visit, in a way that might be distracting, we elect instead to follow them around and do what they do as much as possible.

Obviously, the users you are shadowing need to know you're doing this because it could be awkward if they didn't. If they do, however, shadowing can be a productive tool, especially in the earliest stages of the design process, helping you get insight on a specific task or activity.

After focus groups, surveys, interviews, and other pre-field research about the product, users, and environment, you'll most likely have identified your product's target users and target environment. This is important because not only do you want to shadow the right users in the right location, you also want to have some idea of why you're doing it. Do you have a hypothesis about how the product will be used and you want to test that out? The better focus you have will make the shadowing productive.

It may be that site visits and user shadowing don't necessarily offer the sort of comforting quantitative data that we've come to expect from particular usability methods. Still, if we are interested in understanding the entire context of UX in order to build, evaluate, and then monitor and maintain an effective and satisfying, user-centered product, site visits and user shadowing allow for that, can be done alone or in groups, and are great tools for getting you outside of the building.

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"I'VE MET GREAT PEOPLE IN MY AREA AND IN MY FIELD, THANKS TO STC!"
"I joined the Management SIG because that's my primary role right now. I like the ability to specialize in a specific area, which is why the SIGs are such a great resource. I joined a Chapter because I like having that local connection. And the Eastern Iowa Chapter is filled with terrific people who are passionate about technical communication. I always learn something new when attending a chapter meeting!"
liz herman
MY NAME IS LIZ HERMAN AND
I'M AN STC MEMBER
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1 30 Sept–3 Oct
The **American Medical Writers Association (AMWA)** will hold its 75th annual conference, with a theme of "Quest Toward Brilliance," at the Grand Hyatt San Antonio in San Antonio, TX. For more information, contact:
AMWA
+1 (301) 294-5303
amwa@amwa.org
www.amwa.org/events_annual_conference

2 26–30 Oct
The **Human Factors and Ergonomics Society (HFES)** will hold its 2015 international annual meeting at the JW Marriott in Los Angeles, CA. For more information, contact:
HFES
+1 (310) 394-1811
info@hfes.org
www.hfes.org/web/HFESMeetings/2015annual-meeting.html

3 4-7 Nov
The **American Translators Association (ATA)** will hold its 56th annual conference at the Hyatt Regency Miami in Miami, FL. For more information, contact:
ATA
+1 (703) 683-6100
ata@atanet.org
www.atanet.org/conf/2015

4 6-10 Nov
The **American Society for Information Science and Technology (ASIS&T)** will hold its Annual Meeting in St. Louis, MO. For more information, contact:
ASIS&T
asis@asis.org
https://www.asist.org/events/annual-meeting

5 8-10 Nov
The **Public Relations Society of America (PRSA)** hosts their international conference in Atlanta, GA. For more information, contact:
PRSA
+1 (800) 350-0111
www.prsa.org/Conferences/InternationalConference/

6 25–28 Jan 2016
The Annual **Reliability and Maintainability Symposium (RAMS)** 2016 will be held at Loews Ventana Canyon in Tucson, AZ. This year's theme is "R&M: Critical to Success in a Technology Reliant World." For more information, contact:
RAMS
+1 (603) 863-2832
www.rams.org

7 11–15 Feb2016
The 2016 *American Association for the Advancement of Science (AAAS)* Annual Meeting will take place at the Washington Marriott Wardman Park in Washington, DC. The theme is "Global Science Engagement." For more information, please contact:
AAAS
+1 (202) 326-6450
meetings@aaas.org
http://meetings.aaas.org

* STC-related event

Jack (or Jill) of All Trades, Master of Some:
The Raw Materials for a Fulfilling Communications Consulting Career

BY MARILYN WOELK | *Senior Member*

I NEVER SET OUT to be a journalist or a business owner. In college, I initially majored in music and minored in English, but switched my major to broadcast production, thinking that I would end up somewhere in the entertainment industry (either behind a camera or in front of it).

When I graduated from college, I realized that I didn't want to hold props in a TV studio or show up at 4:00 AM to do the work to eventually land me a significant role in film/broadcasting. Instead, I ended up substitute teaching, and then worked for a book publisher as an advertising copywriter. It was my last "real job." I began freelancing, first as a copywriter for a giftware company, then as a textbook editor for a major educational publisher, and later as an instructional designer, technical writer, and editor for corporations such as Xerox Corporation, Fujifilm USA, Johnson & Johnson, Eastman Kodak Company, Heidelberg, and others. My background in broadcasting taught me how to plan a project from beginning to end and how to map where all of the key transitions will occur. It also taught me how to choose a good "cast."

After freelancing for a few years, recruiters began to ask me to refer people for job openings they had. I did referrals for about a year (collecting small "finder's fees") and then realized that instead of referring people to work for others, I could open my own company. Before long, I had 14 employees and 10 subcontractors working for me on Fortune 500 accounts. My company began providing training development, change management consulting, technical writing and editing, marketing communications, and website development. We specialized in highly technical information about which competitors' companies might have had difficulty learning.

My consulting business grew, and I grew with it. Although I was told in college that I couldn't have so many different interests and needed to focus on a specific career path, I realize now that being a "Jill of All Trades" helped me be successful as a consultant.

As a Jill, I was interested in seemingly opposite things that were beneficial to my success as a consultant. Some of these interests included:

- managing the big picture, and also the details of a project;
- documenting existing processes, and developing new processes and change management procedures;
- writing extremely technical copy (because I always learn something new) and developing very creative copy that helps others learn something;
- determining where to delete graphics in favor of white space, and where to add new graphics and branding; and
- working collaboratively and also individually.

In order to build my business, I needed to use a wide variety of skills and interests in creative and technical areas. I didn't need to be an expert in all trades, I just had to know enough to manage the project or manage the talent. I also had specific expertise that others didn't have. I was Jill of All Trades in some areas, and I was an expert (master) in others.

As a person who has felt torn trying to choose just one area to study or one career to focus on, I refused to fit into a mold and ended up in a job that provided me with the first real moments of satisfaction in using all of my interests and expertise to my full potential.

If you are thinking about becoming a consultant, here are some things you should consider:

- Do you like to work alone?
- Can you deal with less structure and create your own daily work habits?
- Do you know about contracts or have a resource to help you with this?
- Do you know about finances or have a bookkeeper and accountant?
- How will you charge clients? If you charge by fixed bid, how will you amend quotes as project scope changes?
- How will you track and collect accounts receivable?
- Are you able to move beyond implementing what is requested by a client in order to suggest best practices for your client's project needs?
- Do you have a bit of knowledge in several business-related subjects, and a lot of knowledge in specific client services you will offer?

As I have embraced the Jill in me, I have tried to keep current with a variety of new technologies that my clients may need so that I understand the marketplace and continue to learn about all trades. If you think you might be heading toward becoming a Jack or Jill/Master, and you need a Jill to talk to, I'm your girl! Happy trails on trading your career for a destiny that you can master. Don't fear the journey!

MARILYN WOELK *is an STC Senior Member, a past president of the Rochester STC Chapter, the current acting manager for the Consulting and Independent Contracting SIG, and the president of Wingz Creative and Technical Group, Inc.—a business and communications consulting firm in Rochester, NY.*

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—**Willam van Weelden,** Technical Writer, WvanWeelden Consultancy

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